DWI Surveillance by the Zuni Police Department. Malcolm B. Bowekaty, Class of 1990.

The Zuni Indian reservation is located in west central New Mexico adjacent to the Arizona border. Albuquerque, Grants and Gallup are the nearest towns providing major economic, business and employment services for the reservation. The Zuni reservation, comprised of 408,564 acres, is an area of broad mesas and plateaus interspersed with deep canyons, dry washes and wide valleys. Two major roadways, route 602 and New Mexico State road 53, bisect the reservation into quadrants.

There are approximately 8,400 registered tribal members residing on the Zuni reservation (Zuni Census Deptartent). The Zuni pueblo has the major governmental, educational and service agencies while Blackrock harbors the hospital and residential areas. Several small businesses provide minor staples. The unemployment rate is fifty-six percent (56%) with few employment opportunities available (Zuni Census Department and the BIA Labor Force Survey). Gallup (population 25,000) to the north and Grants (population 10,000) to the east provide more job options, requiring frequent commuting.

Historically, alcohol has been illegal on the reservation but people still transport alcoholic beverages or drink and drive back to the reservation. Two package liquor stores operate on the northern border. Approximately twenty miles west of Zuni pueblo is another liquor store or tavern which people frequent. The blue laws of McKinley county also contribute to people crossing the Arizona border on Sundays for securing liquor.

These circumstances increase the amount of drinking and driving as well as other alcohol problems. A review of the alcohol-related injuries from morbidity and mortality records at the Zuni-Ramah Service Unit indicates a complex health problem. Clinical mortality reviews have consistently recorded motor vehicle injuries as 15% of all deaths and the crude death rate at 40.1 per 100,000. A critical indicator for alcoholism, cirrhosis, accounts for 26.5% mortality or a crude death rate of 112.5.[12] This is ten times the US average (11.3). The Indian Health Service Chart Series attests to the trend of injury as the leading cause of death (176/100,000) and the second leading cause of hospitalizations (2,013/100,000) for the Albuquerque Area. Further review of Zuni tribal law enforcement and court documents indicates average annual alcohol-related arrests at 1,201 (Zuni Police Dept). Public intoxication arrests average 803 per year while DWI arrests average 187 per year. These statistics indicate complex health issues for the Zuni tribe and the Indian Health Service Hospital.

Although the Zuni tribe receives a half-million dollars annually for drug and alcohol-abuse programs, effective surveillance or treatment programs have not been devised and evaluated for effectiveness. The Zuni Police Department and tribal courts receive Bureau of Indian Affairs funds. Again, partially effective programs are adopted to combat alcohol-related problems. The tribal police department, tribal courts and alcoholism program have initiated special emphasis campaigns on driving while intoxicated (DWI) issues. These are ideal strategies, especially in light of finite Contract Health Service dollars which can be depleted in a series of motor vehicle crashes. In fact, a recent four-vehicle crash with alcohol involvement cost the Service Unit Contract Health funds over $100,000.

STUDY MODEL AND OBJECTIVES

Research from mainstream America has indicated the relative ineffectiveness of driver-improvement programs for alcohol-impaired drivers. Yet we see large sums of funds diverted to adapt or synthesize similar programs on reservations such as Zuni. Sobriety checkpoints and surveillance alone are ineffective. However, researchers looking at DWI interventions have emphasized intense publicity, surveillance and visibility of sobriety checkpoints as factors leading to successful outcomes.[1,8,10,11]

Researchers from Scandinavian countries, NHTSA-funded Alcohol Safety Action Projects, and studies from Australia support the efficacy of DWI interventions based on the deterrence model.[1,5,9,11,15] The deterrence model postulates that the efficacy of deterring drinking drivers is dependent on three factors:

1. the perceived certainty of apprehension.
2. the severity of punishment.
3. the swiftness of arrest and punishment.

In this study, I have used the deterrence model to examine DWI factors, including police and court record-keeping, at the Zuni Indian reservation.

METHODS

The study sample was abstracted from the Zuni Police department and Zuni Tribal court data systems. The Zuni-Ramah Service Unit ambulatory patient care database was referenced for general statistical information. Records on Driving While Intoxicated (DWI) arrests and prosecution were obtained for the study period, September, 1990, to February, 1991. Only records that had complete information and were cross-referenced with court records were considered as valid cases. Only sixty-seven records met the criteria for the study.

Interviews were conducted with the captain, Chief of Police and the Chief Judge. Topics discussed included the arrest and prosecution process, barriers that hinder this process, standards on screening, objectivity of testing equipment, and sentencing considerations. Conviction rates and rehabilitation issues were not addressed in this study.

The study incorporated three phases to detect points where the data collection and arrest process are severely compromised. The baseline period, September and October, was meant to evaluate standard operating procedures. The intervention phase, November and December, verified the reliability/ unreliability of the apprehension and prosecution process on cases resulting from the sobriety checkpoints. The time frame coincided with the holiday seasons (Halloween & Thanksgiving) and the Zuni religious ceremonial activities (Shalako & religious katchina dances) where alcohol and sobriety could be given high visibility. The post-intervention phase, January and February, was used to define temporal changes in data collection and sobriety checkpoint effectiveness.
All information was analyzed using Epi Info Version. 5.

RESULTS

During the study period, six (6) variables had the following results on age, gender, time of arrest, month of arrest, place of arrest and number of prior DWI arrests.
Age: Individuals ages 20-29 years accounted for 33% of the cases. 30-39 year olds were 43% of the cases. 18% of the cases were in the 40-49 age bracket. Only 4.4% or 3 cases were observed in the fifty to fifty-nine (50-59) interval. No cases were recorded for the sixty year age interval. One case (1) or 1.4% was observed in the 70-79 age bracket.
Gender: Ninety-two percent (92%) were male and 7.5% were females.
Month of arrest: Arrest percentages for September through February indicated September as the highest arrests with 52.2% (35 cases) observed. Arrests for October were 17.9% November arrests were at 19.4%. December had the lowest rate at 5.9%. There were 14.9% arrests in January. February had 17.9% arrests processed. The mean arrests per month was 11.2.
Time of arrest: 46.2% of all arrests occurred between 6 pm and 12 midnight. 39% of arrests occurred from 12 midnight to l am.

Place of arrest: Most of the arrests (63%) took place in the Zuni Pueblo. A major residential area, Blackrock, was the second highest location for arrest (19.4%). Only 7 arrests occurred at the sobriety checkpoints.
Prior DWI arrests: 52% of the sample were arrested for the first time during the study period. 28% had one prior DWI before the study period, 8% had two, and 12% had 3 or more prior convictions.
Prosecution trend: Of the 67 arrests in the 6-month period (September to February), 33 were found guilty and 34, not guilty.

DISCUSSION
The unreliability of police data became evident during the baseline period and the first month of the intervention period. Most officers used subjective, probable-cause methods to decide on which vehicles to stop. Officer discretion was used at that time to detect traces of drinking and driving such as alcohol odor, slurred speech, unfocused eyes and slow reaction or disorientation. If an officer deemed a driver intoxicated, psychomotor and neurological field sobriety screens were enacted. Approximately 75% of all arrest records listed field sobriety results as primary evidence, even though the Intoxalyzer results were included in the case files. These intoxalyzer results were used as supplemental records but not as part of the court or prosecution records. It is ironic that the captain indicated that the intoxalyzer is calibrated for each use. It would seem reasonable, therefore, to trust this method more than field screenings. Furthermore, there is no immediate check on prior DWI arrests or whether the offender is licensed or unlicensed.

During the prosecution or arraignment phase most officers did not present further evidence, such as intoxalyzer results, to ensure successful intervention. Most defendants had free legal representation as well as a special prosecutor for the police department. The lack of Blood Alcohol Concentrations (BAC) levels in court documentation was a key determinant for dismissals. The Zuni Tribal Code has no per se law nor does it specifically state a quantified level for DWI offenses. Numerous Tribal Council ordinances and amendments have created an inconsistent tribal code that is not codified for easy reference and statutory citations.

The captain and chief judge cited the lack of a uniform traffic code as the primary reason for the results of the study. They stated that officers perceive conflicting statutes, which create cross-referencing problems when they have to issue a citation for violations. The judge emphasized that he has to spend time referencing the latest edition of Tribal Council resolutions, amendments and ordinances to be consistent and fair in sentencing. Otherwise he will violate due process for the defendants. He further stated that "first-time offenders are referred to the Zuni Division of Alcoholism DWI program and repeat offenders get jail time, but not consistently."

These issues explain a large part of the results. The deterrence model states that "a legal threat is a function of the perceived certainty, severity and swiftness of punishment in the event of a violation of the law. The greater the perceived likelihood of apprehension, prosecution, conviction and punishment, the more severe the perceived eventual penalty, the more swiftly it is perceived to be administered, the greater will be the deterrent effect of the threat." This clearly is not the case in Zuni DWI issues. The study findings on prosecution trends and prior DWI arrests indicate low certainty of apprehension and lack of perceived severity of punishment.

The sobriety checkpoints were ineffective in terms of prosecution and in comparison to overall arrest rates. The publicity and visibility of the checkpoints were not definitive factors for low arrest rates. I believe that the subjective methodology used by police officers is the key variable. Low certainty of apprehension for DWI can explain the fact that most arrests occurred around the village area and during times when police patrols could detect weaving and improper lane changes. Night time is the most patrolled time for the Zuni Police department.

RECOMMENDATIONS

The following brief recommendations are offered to improve the systems addressing the DWI issue.

A uniform traffic code would be a great improvement on the existing uncodified tribal approach. The ease of issuing traffic citations and sentences would be self-evident in a uniform traffic code, since a single statutory reference would govern sentencing and citations by police officers.

The police need more BAC testing equipment to objectively assess alcohol levels that would stand court scrutiny. Since this study indicated more arrest around the village area, more intoxalyzer machines would be an efficient method to process more DWI offenders. The longest drive to the police station is less than five minutes. Therefore, the above suggestion is feasible and should significantly increase certainty and severity of apprehension and punishment.

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